

## **Estrogen – the Neglected Side of Masculinity**

Many men who can boast normal levels of testosterone nonetheless exhibit characteristic symptoms of the male menopause. They find their energy diminishing and their sexual life faltering. If this situation is due to a hormonal imbalance, it may not be related to testosterone. Frequently it is in the level of estrogen, the female hormone, where the trouble lays.

Men react with surprise when they learn the male body contains its own natural supply of estrogen. They are equally unprepared for the news that estrogen is a normal aspect of their hormonal makeup. The male body actually manufactures the female hormone from testosterone. An enzyme in the body, aromatase, converts a small portion of testosterone into estrogen, a process necessary for the healthy functioning of estrogen-sensitive tissues in a man's body.

It is likely that estrogen is beneficial to the male brain. Estrogen is definitely important in influencing certain natural sexual functions through its effects on brain chemistry. The very areas of the brain involved with sexual function require estrogen for its special purposes in those specific locations. When it comes to estrogen levels, however, the effective range in the male body is very narrow. Too little estrogen will neuter a man just as effectively as too little testosterone. Too much estrogen can displace testosterone at various cellular receptor sites, switching off important cellular activities.

As we grow older aromatase levels tend to increase, resulting in greater estrogen production. In addition, methods for eliminating estrogen, once it has been created, decline. Consequently, the middle-aged man becomes estrogen dominant. By the time a man reaches his fifties the estrogen level in his body may actually exceed that found in a menopausal woman on estrogen replacement therapy. The changing ratio of estrogen to testosterone is a major

factor underlying a common form of male menopause known as metabolic andropause.

Estrogen dominance develops slowly in men. Some common reasons for midlife estrogen elevation in males include:

- Age-related increases in aromatase activity
- Obesity
- Alteration in liver function
- Zinc deficiency
- Overuse of alcohol
- Drug-induced estrogen imbalance
- Ingestion of estrogen-enhancing food or environmental substances

High estrogen levels are associated with increased risk of heart attacks in males – the exact opposite of its effect in females, in whom it has cardioprotective effects, dilating the coronaries, decreasing clotting factors and revving up the body's natural clot-busting system. Increasing levels of estrogen in men may adversely affect the prostate gland. Some studies have found that men with higher estrogen levels are more likely to develop benign prostatic hypertrophy. In many men, high estrogen levels cause an actual reduction in testosterone production, and reduce the effective availability of testosterone. A relative excess of estrogen to testosterone diminishes male sexuality.

Many physicians have neglected estrogen's role in males. In the bodies of both men and women, the balance of estrogen and testosterone is critical. By overlooking the effects of estrogen in males, physicians have found themselves at a loss to explain the failure of testosterone replacement therapy in men who seem ideally suited to it. Observations of these failures have lead many physicians to conclude that testosterone is not significantly related to male midlife changes. In such instances, the failure may be in neglecting the other side of the equation – estrogen.

If upon testing your hormone levels you discover a relatively high estrogen level, you might resolve the problem of metabolic andropause by first addressing the common causes of elevated estrogen. Estrogen dominance that is unresponsive to the measures outlined may require intervention that is more intensive, supervised by a knowledgeable physician.

If you are overweight, reduce your caloric intake and follow a Mediterranean-type diet. Fat cells convert testosterone to estrogen. Moreover, obesity is associated with lower testosterone levels. As the pounds drop off, so will many of the symptoms of male menopause. Increasing consumption of cruciferous vegetables, such as broccoli and cauliflower, will stimulate removal of excess estrogen. The phytoestrogens in a diet rich in soy compete with estrogen receptor sites, block its actions, and stimulate the liver to process and excrete excess estrogen. Avoid grapefruit, as it tends to inhibit the liver's breakdown of estrogen. Alcohol significantly inhibits clearance of estrogen from the blood and reduces zinc levels. Consider reducing your consumption of alcohol or give up drinking altogether.

Some nutritional supplements have been found to help restore a proper balance of testosterone to estrogen. Many men can reduce estrogen levels by supplementing with zinc, which inhibits the conversion of testosterone to estrogen. Vitamin C and chrysin may further improve the testosterone to estrogen ratio. Check with your physician to determine appropriate doses for you.

Begin a regular program of resistance training exercise, after receiving medical clearance from your physician. Heavy weight training stimulates increased levels of testosterone.

Many prescription and over-the-counter medications have the potential to increase your levels of estrogen. They include some drugs within the following categories: anti-inflammatory drugs, cholesterol lowering drugs, anti-depressants, heart and blood pressure medicine, antibiotics and antifungal agents. If you are on one of them, see if your doctor can find an effective substitute.

The problem of estrogen dominance may not simply be a result of natural metabolic changes in hormone conversion and in hormone excretion. The environment and many foods we consume expose us to numerous synthetic estrogens. Many herbicides and pesticides produce an estrogenic effect. Several of the chemicals given to livestock and poultry are estrogenic.

Men who intend to live a long, vital, and healthy life should address, at some point, hormone levels with their physician just as seriously as things like cholesterol, blood sugar and blood pressure. Maintaining an optimum balance of hormones, including estrogen, is one of many lifestyle choices available for men aspiring to reach peak health and to prevent aging-related declines. You cannot retain the energy of youth, or expect to maintain functional ability and resilience without a life in balance.